

DRAFT



Greening Government Plan

March 17, 2006



Rick Grice, Executive Director

Colorado Department of Labor and Employment Greening Government Plan

Date: March 17, 2006
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1. Agency Information, Impact Identification and Greening Government Team

1.1 Agency Description and Scope

The Colorado Department of Labor and Employment's (CDLE) mission is to maximize the value of employment, training, and workers compensation services; administrative dispute resolution processes; and public and workplace protections for the citizens and employers of Colorado.

The Department's 1100 plus employees primarily office out of two Denver locations: 633 17th Street and 251 East 12th Avenue; however, the Department also owns or leases approximately forty (40) other office spaces throughout the state.

The four (4) Department divisions, and their missions, are:

The Division of Workers' Compensation

Our mission is to assure the quick and efficient delivery of disability and medical benefits to injured workers at a reasonable cost to employers, without the necessity for litigation. Responsibilities of the Division include administration of the workers' compensation statute, claims processing, records maintenance, insurance compliance, medical cost containment and first-level dispute resolution.

Division of Employment and Training

Through a comprehensive integration of Workforce Development, Unemployment Insurance and Labor Market Information programs, the Division of Employment and Training shall provide quality, customer-driven employment and training services to job seekers and the business community. This is accomplished by the timely and accurate payment of Unemployment Insurance benefits; comprehensive labor market data and analysis; and, effective, result-driven workforce development

services including assessment, job readiness/search assistance, occupational/classroom training, job referrals and business services.

The Division of Oil and Public Safety

The Mission of the Division of Oil and Public Safety (OPS) is to protect the users of petroleum products, users of explosives, boiler owners and public school students in the areas of safety, product quality, accurate measurement and safe building design. We protect all citizens from damages to public health and the environment caused by leaking petroleum storage tanks.

The Division of Labor

It is the mission of the Colorado Division of Labor to serve and protect the interests of Colorado employees, employers, and the general public through the responsible administration, regulation, and enforcement of Colorado labor laws.

The Department's past "greening" efforts:

- The building addition to the Department's 251 East 12th Avenue (251) location is the **first** state-owned building to receive Leadership in Energy and Environmental Design (LEED) Certification from the U. S. Green Building Council.
- Departmental staff at 251 instituted a "Green Housekeeping Policy" (see Attachment A)
- Departmental staffs at 251 personally recycle aluminum, glass, and plastic.
- The Department plotted on a map all employees' home addresses to determine the best, central location for the new metro area lease, which resulted in a lease at 633 17th Street, Denver, CO.
- The Department considered all avenues of efficient transportation in selecting a new metro area lease location, e.g., car pools, light rail, buses, bicycles, and motorcycles.
- Collocation: Wherever feasible, the Department considers collocating with other State agencies, local governments, or program partners. The largest collocation effort was at the 633 17th Street lease and included this Department and the Department of Personnel and Administration, which collocated from 3 other locations.
- The Department negotiated a 10-year lease for its primary work location, 633 17th Street, which included a light rail (RTD) station at the main entrance doors.
- Hyder Construction, contractor for the Department's LEED certified building at 251, also was selected to complete the build-out of leased space at 633 17th Street. Hyder incorporated some of the LEED principles and materials in the 17th Street location build-out.
- The Department's Employee Advisory Council (EAC) met with building management at 633 17th Street to initiate a paper recycling program, at no additional cost to the Department.

- The Department's Procurement & Contracts Office (PaCO) encourages vendors to submit proposals on recycled paper and encourages Department staff to recycle vendors' old catalogs (at no cost to the State).
- The Department negotiated and instituted the ECO Pass for employees in Denver.
- The Department, annually, recycles old phone books and obsolete State statutes.

1.2 Agency Impacts on the Environment and Human Health

The Department's environmental impacts consist of:

- Employees commuting to work (to more than forty work locations statewide) and very few HOV (high occupancy vehicle) lanes are utilized
- Printing (reports, unemployment insurance benefits warrants, statements purchase orders, contracts, e-mails, general business documents)
- Electrical usage (at more than 40 worksites) consisting of lighting, heating, ventilation, air conditioning, business machine operations (e.g., computers, copiers, printers, faxes, scanners, servers, refrigerators, microwaves, elevators)
- Water usage (mostly for internal building usage at more than 40 worksites)
- Vehicle energy/fuel/emissions/waste fluids – the Department has 10 vehicles in use for its business operations for Tax Auditors, Boiler Inspectors, Workforce Development Programs
- Chemicals – the 40+ worksites utilize chemicals in cleaning and maintaining the offices (e.g., janitorial chemicals, air conditioning chemicals, refrigeration chemicals)
- Paper Waste—FY05—107,008 pounds of paper destruction (i.e., shredding); old statutes collected and disposed of at Capitol facility; phone books do not get recycled according to an established/standard agency-wide policy & procedure (SPP)
- Non-paper media—FY05—2587 pounds of media destruction (i.e., tapes, microfiche, and ID badges)
- Other Waste products – the 40+ worksites have a variety of waste products requiring disposal (e.g., old equipment, old furniture, “dirty” water and chemicals from cleaning worksites, sewer)
- Air – vehicle emissions, chemical and water evaporation, worksite air quality degradation resulting from human biological and routine work activities of employees and guests

1.3 Agency Operational Costs

Information and documentation of Department's usage of energy presently does not constitute part of any routine report. The Controller's Office (Accounts Payable) would need to provide --for base-lining purposes-- the information as follows:

CDLE's electrical usage and costs for each location (leased and owned)

CDLE's natural gas usage and costs for each location (leased and owned)

CDLE's water and sewer usage for each location (leased and owned)

CDLE's employees' use of State vehicles (mileage and fuels costs)

CDLE's other miscellaneous energy expenses

1.4 Agency Greening Government Team Members

Ron Arthur, Director, Strategic Planning and Policy Initiative

Lisa Eze, Director of Purchasing and Contracts

Angie Fyfe, Project Manager, Unemployment Insurance Program

Department Subject Matter Experts – as identified and added to subcommittees

2. Long-Term Greening Objectives

CDLE's long-term greening objectives are as follow:

- Research, and institute if appropriate, paper recycling programs at all CDLE leased and owned properties.
- Research, and institute if appropriate and cost effective, glass and aluminum can recycling programs at all CDLE leased and owned properties.
- Include clauses to address environmental issues in purchase contracts and leases.
- Draft business continuation plan for use in emergency situations resulting from health/safety problems and environmental concerns that arise in the workplace
- Develop a checklist for use by those negotiating and drafting contracts for the leasing and purchasing of real property
- Research and institute ways to reduce energy consumption at CDLE owned and leased properties.
- Procure flex fuel and alternative fuel vehicles for fleet usage
- Analyze opportunities for Telecommuting to reduce traffic flow and the resultant effects of pollution produced by automobile exhaust.

3. Short-term Actions and Priorities

CDLE's short-term actions and priorities are as follow:

- Develop a Departmental Standard Policy and Procedure (SPP) for greening considerations at the Department level.
- Educate Department staff to become aware of ways they can help make the state “green.” For example, encourage staff at all locations to duplex copy and duplex print all multiple paged documents.
- Become the pilot agency to scan and retain electronic copies of all executed contracts and purchase orders, thus eliminating the need to retain originals in paper format. The State Controller has agreed to the concept.
- Institute a “Green Housekeeping Policy” at all Department-owned and leased locations.
- Implement video conferencing practices for training/education whereby travel between one of the outlying work units (40 total) and either of the Denver main office buildings would be curtailed, which, in turn, would reduce traffic flow and the polluting effects of automobile exhaust. [The added economic benefit would be the saving of a significant amount of taxpayer money].
- Research educational and training opportunities for Purchasing staff on “green purchasing.”
- Draft environmental contract language that reflects consideration of environmental factors when leasing or purchasing real property.
- Identify Departmental environmental subject matter experts (SMEs) and involve same in developing and executing “greening” goals. [Recommend the same approach be implemented at a State level and include listing on State Greening Website.]
- Draft criteria for determining when conditions may require an emergency response by management to protect the health and safety of employees. This would include educating managers and supervisors on biological threats, air-borne contaminants, and standards for a healthy workplace environment. Elevate to State level policy.

4. Management Systems

4.1 Education and Training of Staff

Education and Training of Staff have included (or will include) the steps/tasks as follow:

- Conducted employee survey to generate employee interest and gather greening input from them. [Additional surveys involving all employees and subject matter experts (SMEs) anticipated]
- Purchasing and Contracts Office open houses will include vendor offerings and handouts concerning environmentally preferred purchasing.

- An educational display concerning LEED certification and greening efforts is planned for the 251 staff entrance.

5. Tracking Progress and Program/Plan Review

5.1 Agency Tracking and Reporting Form

The agency will complete and submit the annual Agency Tracking and Reporting Form to be issued each year to the State Sustainability Coordinating Committee. CDLE will present both ideas and accomplishments to Division heads and their designated representatives throughout the course of the year to make them aware of all greening efforts within the Department. Best practices developed within one Division will be shared with all of the remaining divisions.

5.2 Continuous Improvement

- The process by which greening government efforts will be evaluated and monitored to ensure they are working and achieving initial goals will include utilizing the talents of both SMEs and enthusiastic volunteers to encourage and to document environmental accomplishments at all hierarchical levels and among work teams.
- The process by which feedback will be encouraged and incorporated into future planning will include sharing information via electronic reports and establishing an accessible site for depositing ideas from engaged employees for all employees to view.
- This greening government plan will be reviewed and altered (if necessary) by the Department (CDLE) Greening Committee, who will be responsible for overseeing this process. When appropriate, the Executive Management Team will be apprised of a “greening” task or project that could transcend the approval authority of a Division head because of the affect on other policies & procedures applicable to the entire Department.

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Date: September 21, 2004 *revised June 1, 2006*
To: Facilities Staff, Unemployment Insurance Executive Staff
Prepared by: Angie Fyfe, UI Project Manager 251 East 12th Avenue Addition
Subject: Green Housekeeping Policy for 251 East 12th Avenue Facility

Statement of Purpose

The Colorado Department of Labor and Employment (CDLE), Unemployment Insurance Program (UI), requires the use of a housekeeping policy, which strives to achieve a healthier and cleaner environment by using products and cleaning methods that cause less toxic pollution and waste, conserve resources and habitats, and minimize global warming and ozone depletion.

Said policy shall be referred to as the “Green-Housekeeping Policy,” and shall be instituted at the CDLE-owned facility located at 251 East 12th Avenue (251) Denver, Colorado.

Procedural Requirement

CDLE Facility staff performing housekeeping functions at 251 shall adhere to this policy. Training in green-housekeeping methods is provided to staff. Staff performance shall be rated based on their compliance with this policy.

The Facilities Manager and the UI Executive Staff shall review, and if necessary, revise this policy on June 1 of each year. Revisions to the policy will consider the green-housekeeping guidelines established by the U.S. Green Building Council (www.usgbc.org), Green Seal (www.greenseal.org), and the California Code of Regulations, Title 17, Section 94509 (www.calregs.com).

Acceptable Performance Level Standards

The cleaning products used at 251 shall be selected using one of the following methods, in order of priority:

1. Green Seal Certified. A list of products is found at www.greenseal.org.
2. Consumer Product Standards contained in Title 17, Section 94509 of the California Code of Regulations. Information is available at: www.calregs.com.

3. Using the subsequent guidelines established by the U.S. Environmental Protection Agency's (EPA) Cleaning Products Pilot Program. Information is available at: <http://www.epa.gov/opptintr/epp/cleaners/select/>.

To select a Green Seal certified product, type <http://www.greenseal.org/recommendations.htm> into the Internet browser. Select the desired product type. Select a product from the product list. Products certified by the Green Seal GS-37 standard for Industrial and Institutional Cleaners are acceptable.

If a product is Green Seal Certified, no further product evaluation is necessary. If a Green Seal product is not available, cleaning products shall be evaluated based on MSDS results using the procedures outlined in Appendix A.

The following is the current schedule for cleaning activities at 251:

Area	Product	Certified or VOC Content	Frequency
Bathroom and Tile Cleaner	Butcher's G-Force Multipurpose	Certified per http://www.butchers.com/set_degr.htm	Daily
Bathroom and Tile Cleaner	Butcher's G-Force Multipurpose	Certified per http://www.butchers.com/set_degr.htm	Daily
Carpet and Upholstery Cleaner	Water	Not Applicable.	As Needed
Crawling Bug Insecticide	Bait station insecticide	Does not apply. See Appendix A	As Needed
Disinfectant	Butcher's G-Force Multipurpose	Certified per http://www.butchers.com/set_degr.htm	As Needed
Dusting Aid	Butcher's G-Force Multipurpose	Certified per http://www.butchers.com/set_degr.htm	As Needed
Floor Polish or Wax – Flexible Flooring Material	Waxie Green Neutral Cleaner	Certified per http://www.greenseal.org/certproducts.htm	Bi-Weekly
Floor Polish or Wax – Non-resilient Flooring	Waxie Green Neutral Cleaner	Certified per http://www.greenseal.org/certproducts.htm	Bi-Weekly
Floor Wax Stripper	Enviro Solutions ES-85 Scrub Free Floor Stripper	VOC content 3.9, which is less than CDLE policy limit of 5 (see Appendix A)	As Needed
General Purpose Cleaner	Butcher's G-Force Multipurpose	Certified per http://www.butchers.com/set_degr.htm	Daily
General Purpose Cleaner	Butcher's G-Force Multipurpose	Certified per http://www.butchers.com/set_degr.htm	Daily
Glass Cleaner	Butcher's G-Force Multipurpose	Certified per http://www.butchers.com/set_degr.htm	Daily

General Purpose Degreaser	Butcher's G-Force Multipurpose	Certified per http://www.butchers.com/set_degr.htm	As Needed
Spot Remover	Butcher's G-Force Multipurpose	Certified per http://www.butchers.com/set_degr.htm	As Needed

Approved Practices

(1) Dusting and Dust Mopping

Dusting and Dust Mopping are performed daily on horizontal surfaces and non-carpeted floors. Traditional dusting and dust mopping techniques frequently do not capture materials and can stir them into the air for people to inhale. The CDLE Policy is to remove dust from the building and minimize chemical dust treatments.

General requirements for dusting and dust mopping are as follows:

1. Dusting will be performed with lint-free damp clothes that are neatly folded like a handkerchief to expose multiple sides for absorbing dust.
2. Where possible, vacuum cleaner fitted with a wide area hard floor attachment will be used.
3. Use the widest swivel action mop possible (based on the size of area and the physical abilities of the custodial worker) and a water-based dust mop treatment.
4. Do not use feather dusters.

Specific Dust Mopping Procedures are as follows:

1. Fill a properly labeled trigger spray bottle with dust mop treatment, which has been prepared according to label directions.
2. Spray dust mop treatment onto a clean dust mop. Follow manufacturer's directions for application rate. Apply next to the backing, at the base of the yarn. Do not over treat.
3. Roll the dust mop, treated side in. Place in a plastic bag to cure for at least 24 hours. After 24 hours, place treated/cured dust mop on the frame.
4. Dust mop the area, use a continuous motion, without lifting the mop from the floor.
5. Begin with the mop next to the wall. Walk to the other end of the work area. At the opposite end, pivot the dust mop so that the leading edge remains the same. Return to the opposite end. Overlap the previously mopped path by 2 to 4 inches, to ensure complete coverage.
6. One pass with a properly treated dust mop removes dirt, dust and abrasive particles, without leaving the floor dull or slippery. Sweep accumulated soil to a collection area, lightly shake loose soil from the dust mop, and continue. Remove gum, tape or other sticky residue with a scraper, using care not to mar or scratch the floor finish. Continue the dust mopping process until the entire area has been dust mopped. When completely finished, pick up the collected debris using a counter brush and dustpan.
7. Clean excess dust from the mop head. Place the mop over a trash container. Brush with a stiff bristle brush in a firm, downward motion.
8. Store the mop in a hanging position. DO NOT store the dust mop on the floor. The mop

treatment will stain the floor, and the mop fibers will become matted.

9. When the dust mop no longer attracts soil, it may be re-treated. Spray the mop at the end of the work shift, and hang to cure overnight.
10. Dust cloths may also be treated with dust mop treatment. Spray lightly and allowed to cure for 24 hours before use.
11. Launder soiled dust mop heads. Soak mop heads overnight in a neutral pH cleaning solution. Rinse thoroughly, wring out and hang to dry.
12. Re-treat as directed for initial treatment.

(2) Entryways

Entryways are the first line of defense against contaminants. Thus, special effort should be focused in these areas. CDLE policy is to perform an intensive cleaning focus on the entryways to capture soils at the entries rather than to remove it after it has spread throughout the entire facility.

Entryway cleaning procedures are as follows:

1. Clean entryways beginning outside the building.
2. Vacuum, sweep, cleaning these mats daily.
3. Make sure mopping solutions are kept clean using only the correct amount of cleaning chemical. Do not overuse concentrated cleaning chemicals. Remake as necessary and dispose spent solution appropriately.
4. Periodically clean under floor mats to reduce the potential for moisture to lead to bacterial and fungal growth. Floor mats should be replaced when they get wet.

Begin by cleaning outside walkways leading into the facility. This is especially true during inclement weather. Large outside entryway areas (CDLE employee entrance and loading dock) will be swept daily. Outdoor areas are cleaned quarterly with a high-pressure power washer. During snow and ice, the entryways are monitored and cleaned as needed to protect occupants and visitors from slips and falls. The selection of the appropriate ice melting compounds that will not be tracked into the building is important.

(3) Floor Care - General

Floor care includes floor stripping and re-finishing. CDLE's policy for floor care focuses on pollution prevention, minimizing the need to strip and recoat a floor, or extract a carpet. Frequent dust mopping of resilient tile floors, especially close to entryways and other sources of particulates (i.e. near copier rooms).

1. Maintain floors on a daily basis, by cleaning walk-off mats, and dust mopping and vacuuming of solid and carpeted floors.
2. Develop an interim restoration program to maintain adequate levels of floor finish and appearances.

General floor care directions are as follows:

1. Solutions for cleaning floors and carpets shall be applied from a sprayer in a stream, as compared to a fine mist. This will minimize the amount of material that is atomized and potentially inhaled, as well as minimize over-spray.
2. Conduct major cleaning activities on a weekend or some other extended time period when occupants will not be in the facility. Notify occupants prior to stripping, recoating, or extracting if after hours or weekend timing cannot be scheduled.
3. Only the products identified are acceptable for floor care.
4. Use the least amount of water and ventilate the area with fans if necessary for rapid drying to minimize both the possibility of mold growth and slip-fall incidents. This allows maximum time for the building to be ventilated (flushed with fresh air) prior to the return of the occupants.

(4) Floor Care – Floor Stripping

Floor Stripping procedures are as follows:

1. Notify occupants before a strip is scheduled.
2. Use products only from the selected list (see section on product selection). Mix and use approved products according to manufacturer's directions.
3. Use the appropriate personal protective equipment.
4. Ventilate both during and after stripping.
5. Place "Floor Hazard" signs at entrances to the area being stripped. Move furniture. Work around heavy furniture or equipment that cannot be moved. Sweep the floor with a treated dust mop. Remove gum, tape and other foreign materials with a scraper using care not to mar or scratch the surface finish.
6. Prepare equipment. Assemble two mop heads and handles. Label one "Strip Mop". Label the other "Rinse Mop". Assemble two mop buckets and wringers. Label one "Strip Bucket". Label the other "Rinse Bucket". Place black or high productivity stripping pad on the rotary floor machine. Fill the Strip Bucket with a solution of floor stripper (see section on product selection) following manufacturer's recommendations for dilution rates and water temperature. Fill the Rinse Bucket with clean, cold water. Add a small amount of a neutral pH cleaner (see section on product selection) following manufacturer's recommendations for dilution rates. Equip a wet vacuum with a floor squeegee tool. Place the equipment in the area where the work will begin.
7. Apply stripping solution to the floor, using the Strip Mop and Strip Bucket. Dip mop in stripping solution. Lift mop and allow excess stripper to drain back into the bucket. Fan out the mop head on the floor and apply stripping solution along the edges. Continue applying solution using an arc motion from right to left, covering the area between the edges. Apply sufficient solution to thoroughly wet the floor, but DO NOT flood it. (Adequate solution coverage will allow a match or toothpick to float on the surface.) Do not allow solution to dry on the floor. Re-apply as necessary to keep the floor wet. Immediately wipe off splashes from walls, baseboards, glass partitions, etc. with a damp cloth. Allow solution to remain on the floor 5 to 10 minutes. Re-apply as necessary to keep the floor wet.

8. Scrub the floor with the rotary floor machine and stripping pad. Scrub in a circular motion, from side to side. Overlap the strokes made by the machine. Keep the floor wet. Re-apply solution as necessary.
9. Remove the stripping solution from the floor with the wet vacuum and floor squeegee tool. Examine the floor for complete finish removal. Re-strip any areas with residual gloss.
10. Rinse the floor. Apply rinse solution using the Rinse Mop and Rinse Bucket. Apply sufficient water to thoroughly wet the floor, but DO NOT flood it. Remove the rinse solution from the floor using the wet vacuum and floor squeegee tool.
11. Damp mop the floor with clean water. Empty the Rinse Bucket and refill with clean water. Rinse the Rinse Mop with clean water. Damp mop the floor with clean water. Remove Floor hazard signs only when floor is completely dry.

(5) Carpet Care

1. Ensure that vacuums are in good working order using appropriate bags and/or filters.
2. Empty or replace vacuum bags when half full. Dispose properly.
3. Clean up spills while they are still fresh.
4. Minimize the amount of moisture used during cleaning.

The primary effort should be a pollution prevention strategy, or one that minimizes the need to extract a carpet. Thus specific focus should be on preventative measures identified above in the maintenance of entryways and through the cleaning of high traffic areas to minimize the need for large scale extraction cleaning.

Carpet Care – Spot Cleaning

When carpets need to be spot cleaned, solutions should be applied from a sprayer in a stream or coarse spray, as compared to a fine mist. This will minimize the amount of material that is atomized and potentially inhaled, as well as minimize over-spray. When carpets need to be extracted, it is important that occupants be notified. Use the least amount of water and ventilate the area with fans if necessary for rapid drying to minimize both the possibility of mold growth and slip-fall incidents.

Carpet Care – Extraction Procedures

It is preferable to conduct major cleaning activities on a weekend or some other extended time period when occupants will not be in the facility. This allows maximum time for the building to be ventilated (flushed with fresh air) prior to the return of the occupants.

Carpets can act as a "sink" that allows particles and other unwanted material to filter down into the backing of the carpets. Once deep down in the carpet the can lead to damage of the fibers and the need to ultimately replace the carpets. But from a health perspective, the biggest enemy of a healthy indoor environment is when moisture provides an opportunity for these unwanted contaminants to become biologically active. Thus, extraction cleaning can get deep down into

the carpets and remove the unwanted contaminants. Unfortunately, extraction cleaning can also add large amounts of water to the carpet, especially if the equipment is not functioning properly.

Specific extraction procedures are as follows:

1. Minimize the amount of cleaning chemicals. Excess chemicals result in rapid resoiling.
2. Use appropriate functioning equipment that will maximize the amount of water being extracted from the carpet to minimize moisture and potential for mold, mildew and bacterial growth.
3. Increase ventilation through fans to dry carpets quickly. Carpets should be completely dry within 24 hours.
4. Dispose of cleaning solutions properly.
5. Select appropriate cleaning solutions from pre-approved list.
6. Mix cleaning solution properly. Using too much concentrated cleaner not only wastes product, but also can lead to more rapid resoiling of the carpet.
7. Make sure that the vacuum pick-up is working properly and that there are no holes or leaks in wands or other attachments the decreases suction.
8. When vacuuming up spent solution, repeat the process multiple times in both directions.
9. Notify occupants before large-scale extraction procedures are used as this activity can affect more sensitive individuals. Proper scheduling is recommended when building is not to be occupied such as before weekends and holidays.

(6) Break Rooms

Break rooms are located throughout 251 and have specific requirements for maintenance. Particular attention should be paid to food waste, trash receptacles containing food debris, recyclables such as soda cans, and other objects that contain food residues, which can attract pests. Occupants are required to rinse out food and drink containers before placing in recyclable collection. Refrigerators used by occupants for their personal use must be emptied and cleaned periodically by the occupants.

1. Clean and sanitize floors, tables, etc. See section on product selection for recommended products.
2. Separate recyclables from trash and makes sure recyclable areas are kept clean (i.e. rinse soda cans) not to attract pests.
3. Make sure that occupants understand how to properly separate trash and recyclables and proper disposal of each.
4. Make sure that waste containers are covered and emptied at least daily.

Highly concentrated cleaning products reduce environmental impacts from packaging and transportation, and typically reduce actual use cost compared to less concentrated alternatives. However, to gain the environmental benefits and to protect workers exposed to these more highly concentrated products during mixing, the following requirements are necessary.

1. Use appropriate protective equipment when mixing concentrated cleaning products.
2. Follow manufacturer's dilution directions. Do not under- or over-dilute concentrated

cleaning products.

3. Make sure that spray bottles (secondary containers) have appropriate labels.
4. Never mix different cleaning products together.

Cleaning personnel should understand that adding extra concentrated cleaning product does not make the cleaner work better or faster, not only wastes products and the associated product expense, but also can result in longer times to do the job (i.e. removing residues), slippery floors and surfaces, and other complications. Finally, never mix cleaning products together.

(7) Restrooms

Restrooms need to be cleaned frequently because of their heavy use and moisture.

1. Prepare sanitizing and disinfecting solutions properly and remix as required.
2. Frequently clean surfaces that hands touch to eliminate the spread of germs (i.e. door knobs, light switches, handles, etc.).
3. Frequently eliminate moisture.
4. Keep floors dry to eliminate slip falls and the build-up of bacteria, mold and mildew.

Make sure that cleaning is done thoroughly, including hard to reach areas such as behind toilets and around urinals. Many products used in the restroom can be quite hazardous, such as drain cleaners and toilet bowl cleaners (see section on product selection). Make sure that appropriate personal protective equipment is used. Never mix cleaning products.

Use large trashcans to minimize overflow and reduce the frequency for policing the area.

1. Check supply cart for proper equipment and supplies.
2. Prepare the area. Place a Restroom Closed sign at the door, if applicable.
3. Clean the exterior of all dispensers and re-stock supplies, including paper towel dispensers, feminine hygiene dispensers, toilet tissue dispensers and hand soap dispensers.
4. Remove trash from all waste receptacles. Clean receptacles with a sanitizer cleaner. Replace liners.
5. Dust mop or sweep the floor, and pick up collected debris with dustpan.
6. Clean all sinks using sanitizer cleaner and abrasive sponge. Leave sanitizer on surfaces according to manufacturer's directions.
7. Clean all mirrors with glass cleaner and soft, clean cloths.
8. Clean and sanitize all toilets and/or urinals. Remove urinal screens from the urinals and using the bowl swab, push water level down in stools. Apply bowl cleaner to the exposed interior surfaces of the bowls and/or urinals, specifically under the rim. Allow time for the chemical to work, while cleaning partitions and showers (approximately 10 minutes - follow manufacturer's directions).
9. Clean stall partitions and walls as needed with disinfectant cleaner.
10. Clean both sides of entrance/exit doors with a sanitizer cleaner, paying special attention to clean hand contact areas.
11. Scrub the inside of the bowls and urinals with a bowl swab. Use an abrasive sponge

for difficult soils. Clean the exterior of the bowls and urinals with disinfectant cleaner. Clean both sides of the toilet seat. Clean the walls around the bowls or urinals with disinfectant cleaner. Flush bowls and urinals. Polish all chrome surfaces with a dry cloth (after cleaning with sanitizer cleaner).

12. Scrub the floor with a sanitizer cleaner using a wet mop, bucket and wringer. If needed, scrub floor grout with a tile and grout brush. Rinse with clear water. Squeegee or vacuum up water, if necessary.
13. Treat sink, shower or floor drains with drain maintainer, if necessary.
14. Inspect your work. If you are satisfied with your work, allow the floor to dry and re-open the restroom. Return cart to supply area and restock.

CDLE Facility Staff Training and Supervision

Administrative procedures ensure that cleaning procedures are maintained for each employee. These records are used in scheduling workers and document tasks are complete. The supervisor is responsible for posting cleaning documentation and training staff to fill out the forms properly.

Verification of tasks is performed based on the form documentation. Daily cleaning task forms document staff, the date of cleaning, tasks performed, cleaning supplies used, and area cleaned. See cleaning records in Appendix B.

In general, CDLE's green maintenance training is similar to traditional procedures. The differences are more a matter of focus than one of technique. There is no question that switching to environmentally preferable procedures requires a higher level of training. CDLE will provide training for their environmentally preferable products to ensure that the proper procedures are communicated to employees. Training will be performed by the Green Seal product suppliers, modified for 251, and updated periodically based on quality of cleaning.

Training in the use of green products must fit with supplier's programs since environmentally preferable product companies also see training as integral to the success of their products. Consequently, CDLE provides formal training programs for specific tasks identified above, such as rest room cleaning, floor stripping, etc., to ensure that their products are used properly.

The education consists of intensive training for supervisors and employees at the outset with periodic retraining as necessary. Supervisors will review this CDLE Green Housekeeping Policy before performing all tasks and requirements outlined above. The supervisor will be then responsible for providing staff training, oversight of processes being followed, and periodic updates and reminders. Training documentation forms are provided in Appendix C.

Appendix A – Product Selection Procedures

These procedures are to be used to select the most appropriate cleaning product if a Green Seal product is not available.

The following California Consumer Product Standards are acceptable standards for this green-housekeeping policy:

Product	Product Type	Allowable VOC Content
Air Freshener	All Forms	25
Bathroom and Tile Cleaner	Aerosol Product	7
Bathroom and Tile Cleaner	All Other Forms	5
Carpet and Upholstery Cleaner	Aerosol Product	7
Carpet and Upholstery Cleaner	Non-Aerosol (dilatable)	.1
Carpet and Upholstery Cleaner	Non-Aerosol (ready-to-use)	3
Crawling Bug Insecticide	Aerosol Product	15
Disinfectant	All Forms	45
Dual Purpose Air Freshener/Disinfectant	Aerosol Product	60
Dusting Aid	Aerosol Product	25
Dusting Aid	All Other Forms	7
Floor Polish or Wax – Flexible Flooring Material	All Forms	7
Floor Polish or Wax – Non-resilient Flooring	All Forms	10
Floor Wax Stripper (light to medium build up)	Non-Aerosol	As-used concentration of 3
Floor Wax Stripper (heavy build up)	Non-Aerosol	As-used concentration of 12
Flying Bug Insecticide	Aerosol Product	25
Furniture Maintenance Product	Aerosol Product	17
General Purpose Cleaner	Aerosol Product	10
General Purpose Cleaner	Non-Aerosol	4
Glass Cleaner	Aerosol Product	12
Glass Cleaner	Non-Aerosol	4
General Purpose Degreaser	Aerosol Product	50
General Purpose Degreaser	Non-Aerosol	4
Heavy-Duty Hand Cleaner or Soap	All Forms	8
Metal Polish/Cleanser	All Forms	30
Spot Remover	Aerosol Product	25
Spot Remover	Non-Aerosol	8

The VOC limits specified in the table above shall not apply to bait station insecticides. For the purpose of this section, bait station insecticides are containers enclosing an insecticidal bait that is not more than 0.5 ounce by weight, where the bait is designed to be ingested by insects and is composed of solid material feeding stimulants with less than 5 percent (%) active ingredients.

The VOC limits specified in the table above shall not apply to any LVP-VOC

The VOC limits specified in the table above shall not apply to air fresheners and insecticides containing at least 98% paradichlorobenzene.

The following definitions apply to the product-table above:

“Aerosol Product” means a pressurized spray system that dispenses product ingredients by means of a propellant or mechanically induced force. “Aerosol Product” does not include pump sprays.

“Air Freshener” means any consumer product including, but not limited to, sprays, wicks, powders, and crystals, designed for the purpose of masking odors, or freshening, cleaning, scenting, or deodorizing the air. “Air Freshener” includes dual/purpose air freshener/disinfectant products. “Air Freshener” does not include products that are used on the human body, or products that function primarily as cleaning products as indicated on a product label or advertisement.

“All Other Forms” means all consumer product forms for which no form-specific VOC standard is specified. Unless specified otherwise by the applicable VOC standard, “all other forms” include, but are not limited to, solids, liquids, wicks, powders, crystals, and cloth or paper wipes (towelettes).

“Bathroom and Tile Cleaner” means a product designed to clean tile or surfaces in bathrooms. “Bathroom and Tile Cleaner” does not include products specifically designed to clean toilet bowls or toilet tanks.

“Carpet and Upholstery Cleaner” means a cleaning product designed for the purpose of eliminating dirt and stains in rugs, carpeting, and the interior of motor vehicles and/or on household furniture or objects upholstered or covered with fabrics such as wool, cotton, nylon or other synthetic fabrics. “Carpet and Upholstery Cleaner” includes, but is not limited to, products that make fabric protectant claims. “Carpet and Upholstery Cleaner” does not include “General Purpose Cleaners”, “Spot Removers”, vinyl or leather cleaners, dry cleaning fluids, or products designed exclusively for use at industrial facilities engaged in furniture or carpet manufacturing.

“Crawling Bug Insecticide” means any insecticide product that is designed for use against ants, cockroaches, or other household crawling arthropods, including, but not limited to, mites, silverfish or spiders. “Crawling Bug Insecticide” does not include products designed to be used exclusively on humans or animals, or any house dust mite product.

“Disinfectant” means any product intended to destroy or irreversibly inactivate infectious or other undesirable bacteria, pathogenic fungi, or viruses on surfaces or inanimate objects and whose label is registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA, 7 U.S.C. 136, et seq.). “Disinfectant” does not include any of the following: (A) products designed solely for use on human or animals, (B) products designed for agricultural use, (C) products designed solely for use in swimming pools, therapeutic tubs, or hot tubs, (D) products which, as indicated on the principal display panel or label, are designed primarily for use as

bathroom and tile cleaners, glass cleaners, general purpose cleaners, toilet bowl cleaners, or metal polishes.

“Dual Purpose Air Freshener/Disinfectant” means an aerosol product that is represented on the product container for use as both a disinfectant and an air freshener, or is so represented on any sticker, label, packaging, or literature attached to the product container.

“Dusting Aid” means a product designed to assist in removing dust and other soils from floors and other surfaces without leaving a wax or silicone based coating. “Dusting Aid” does not include products, which consist entirely of compressed gases for use in electronic or other specialty areas.

“Flexible Flooring Material” means asphalt, cork, linoleum, no wax, rubber, seamless vinyl and vinyl composite flooring.

“Floor Polish or Wax” means a wax, polish, or any other product designed to polish, protect, or enhance floor surfaces by leaving a protective coating that is designed to be periodically replenished. “Floor Polish or Wax” does not include “spray buff products”, products designed solely for the purpose of cleaning floors, floor finish strippers, products designed for unfinished wood floors, and coatings subject to architectural coatings regulations.

“Floor Wax Stripper” means a product designed to remove natural or synthetic floor polishes or waxes through breakdown of the polish or wax polymers, or by dissolving or emulsifying the polish or wax. “Floor Wax Stripper” does not include aerosol floor wax strippers or products designed to remove floor wax solely through abrasion.

“Flying Bug Insecticide” means any insecticide product that is designed for use against flying insects or other flying arthropods, including but not limited to flies, mosquitoes, moths, or gnats. “Flying Bug Insecticide” does not include “wasp and hornet insecticide”, products that are designed to be used exclusively on humans or animals, or any mothproofing product. For the purposes of this definition only, “moth-proofing product” means a product whose label, packaging, or accompanying literature indicates that the product is designed to protect fabrics from damage by moths, but does not indicate that the product is suitable for use against flying insects or other flying arthropods.

“Furniture Maintenance Product” means a wax, polish, conditioner, or any other product designed for the purpose of polishing, protecting or enhancing finished wood surfaces other than floors. “Furniture Maintenance Product” does not include dusting aids, products designed solely for the purpose of cleaning, and products designed to leave a permanent finish such as stains, sanding sealers and lacquers.

“General Purpose Cleaner” means a product designed for general all-purpose cleaning, in contrast to cleaning products designed to clean specific substrates in certain situations. “General Purpose Cleaner” includes products designed for general floor cleaning, kitchen or countertop cleaning, and cleaners designed to be used on a variety of hard surfaces.

“General Purpose Degreaser” means any product designed to remove or dissolve grease, grime, oil and other oil-based contaminants from a variety of substrates, including automotive or miscellaneous metallic parts. “General Purpose Degreaser” does not include “Engine Degreaser”, “General Purpose Cleaner”, “Adhesiver Remover”, “Electronic Cleaner”, “Metal Polish/Cleanser”, products used exclusively in “solvent cleaning tanks or related equipment”, or products that are (A) sold exclusively to establishments which manufacture or construct goods or commodities; and (B) labeled “not for retail sale”. “Solvent cleaning tanks or related equipment” includes, but is not limited to, cold cleaners, vapor degreasers, conveyORIZED degreasers, film

cleaning machines, or products designed to clean miscellaneous metallic parts by immersion in a container.

“Glass Cleaner” means a cleaning product designed primarily for cleaning surfaces made of glass. Glass cleaner does not include products designed solely for the purpose of cleaning optical materials used in eyeglasses, photographic equipment, scientific equipment and photocopying machines.

“Heavy-Duty Hand Cleaner or Soap” means a product designed to clean or remove difficult dirt and soils such as oil, grease, grime, tar, shellac, printer's ink, paint, graphite, cement, carbon, asphalt, or adhesives from the hand with or without the use of water. “Heavy-duty Hand Cleaner or Soap” does not include prescription drug products, “Antimicrobial Hand or Body Cleaner or Soap”, “Astringent/Toner”, “Facial Cleaner or Soap”, “General-use Hand or Body Cleaner or Soap”, “Medicated Astringent/Medicated Toner” or “Rubbing Alcohol.”

“Insecticide” means a pesticide product that is designed for use against insects or other arthropods, but excluding products that are: (A) for agricultural use, or (B) for a use which requires a structural pest control license under Chapter 14 (commencing with Section 8500) of the Business and Professions Code, or (C) restricted materials that require a permit for use and possession.

“LVP-VOC” means a chemical “compound” or “mixture” that contains at least one carbon atom and meets one of the following: has a vapor pressure less than 0.1 mm Hg at 20° C, as determined by ARB Method 310; or is a chemical “compound” with more than 12 carbon atoms, or a chemical “mixture” comprised solely of “compounds” with more than 12 carbon atoms, and the vapor pressure is unknown; or is a chemical “compound” with a boiling point greater than 216° C, as determined by ARB Method 310; or is the weight percent of a chemical “mixture” that boils above 216° C, as determined by ARB Method 310. For the purposes of the definition of LVP-VOC, chemical “compound” means a molecule of definite chemical formula and isomeric structure, and chemical “mixture” means a substance comprised of two or more chemical “compounds”.

“Metal Polish/Cleanser” means any product designed primarily to improve the appearance of finished metal, metallic, or metallized surfaces by physical or chemical action. To “improve the appearance” means to remove or reduce stains, impurities, or oxidation from surfaces or to make surfaces smooth and shiny. “Metal Polish/Cleanser” includes, but is not limited to, metal polishes used on brass, silver, chrome, copper, stainless steel and other ornamental metals. “Metal Polish/Cleanser” does not include “Automotive Wax, Polish, Sealant or Glaze”, wheel cleaner, “Paint Remover or Stripper”, products designed and labeled exclusively for automotive and marine detailing, or products designed for use in degreasing tanks.

“Nonresilient Flooring” means flooring of a mineral content, which is not flexible. “Nonresilient Flooring” includes terrazzo, marble, slate, granite, brick, stone, ceramic tile and concrete.

“Pesticide” means and includes any substance or mixture of substances labeled, designed, or intended for use in preventing, destroying, repelling, or mitigating any pest, or any substance or mixture of substances labeled, designed, or intended for use as a defoliant, desiccant, or plant regulator, provided that the term “pesticide” will not include any substance, mixture of substances or device which the United States Environmental Protection Agency does not consider to be a pesticide.

“Spot Remover” means any product designed to clean localized areas, or remove localized spots or stains on cloth or fabric such as drapes, carpets, upholstery, and clothing, that does not require

subsequent laundering to achieve stain removal. “Spot Remover” does not include “Dry Cleaning Fluid”, “Laundry Prewash”, “Carpet and Upholstery Cleaner”, or “Multi-purpose Solvent”.

“**VOC Content**” means the total weight of VOC in a product expressed as a percentage of the product weight (exclusive of the container or packaging)

Volatile Organic Compound (VOC)” means any compound containing at least one atom of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, and excluding the following:

(A) methane

methylene chloride (dichloromethane),

1,1,1-trichloroethane (methyl chloroform),

trichlorofluoromethane (CFC-11),

dichlorodifluoromethane (CFC-12),

1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113),

1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114),

chloropentafluoroethane (CFC-115),

chlorodifluoromethane (HCFC-22),

1,1,1-trifluoro-2,2-dichloroethane (HCFC-123),

1,1-dichloro-1-fluoroethane (HCFC-141b),

1-chloro-1,1-difluoroethane (HCFC-142b),

2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124),

trifluoromethane (HFC-23),

1,1,2,2-tetrafluoroethane (HFC-134),

1,1,1,2-tetrafluoroethane (HFC-134a),

pentafluoroethane (HFC-125),

1,1,1-trifluoroethane (HFC-143a),

1,1-difluoroethane (HFC-152a),

cyclic, branched, or linear completely methylated siloxanes

The following classes of perfluorocarbons

1. cyclic, branched, or linear, completely fluorinated alkanes

2. cyclic, branched, or linear, completely fluorinated ethers with no unsaturations

3. cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

4. sulfur-containing perfluorocarbons with no unsaturations and with the sulfur bonds to carbon and fluorine, and

(B) the following low-reactive organic compounds which have been exempted by the U.S. EPA

acetone,

ethane

methyl acetate

parachlorobenzotrifluoride (1-chloro-4-trifluoromethyl benzene),

perchloroethylene (tetrachloroethylene).

If the product falls within the limits established by the California Consumer Product Standards, no further evaluation is required. If the product does not fall within these

standards, the subsequent guidelines established by the U.S. Environmental Protection Agency's (EPA) Cleaning Products Pilot Program are used to evaluate the product. They are:

(1) Skin Irritation

Products shall be rated from most preferable to least preferable, based on the amount of all chemical components in the ready-to-use product.

Performance Requirement: The most preferable attribute is a product in which the amount of all chemical components is less than 5% by weight.

(2) Air Pollution Potential

VOCs may escape in to the atmosphere and react to form smog. Smog has been shown to cause irritation to the eyes, nose, throat, and lungs. Products shall be rated from most preferable to least preferable, based on the amount of volatile organic compounds (VOCs) they contain. In addition, preferable products will not contain the following ozone-depleting compounds: CFC-11, CFC-12, CFC-113, CFC-114, CFC-115, halon 1211, halon 1301, halon 2402, HCFC-22, HCFC-123, HCFC-124, HCFC-141b, HCFC-142b, and carbon tetrachloride.

Performance Requirement:

Products shall be rated from most preferable to least preferable, based on the amount of volatile organic compounds (VOC). VOCs may escape in to the atmosphere and react to form smog. Smog has been shown to cause irritation to the eyes, nose, throat, and lungs. The numbers reported refer to the percent by weight of VOCs in the ready-to-use product. The lower the number, the more preferable the product. Prefer product with a VOC content of 10g/L (less than 4% VOC by weight).

(3) Fragrances

This attribute refers to fragrances that are added to the product to improve its odor or to mask an offensive odor. Added fragrances have little cleaning value. Products, which do not contain additives that are unnecessary, will be preferred. "Fragrance" means a substance or complex mixture of aroma chemicals, natural essential oils, and other functional components with a combined vapor pressure not in excess of 2 mm of Hg at 20°C, the sole purpose of which is to impart an odor or scent, or to counteract a malodor.

(4) Dyes

Dyes are often added to a product to enhance its color. Added dyes have little cleaning value; however some dyes are important for safety reasons, such as helping differentiate between water and a harmful product. Products, which do not contain additives that are unnecessary, will be preferred.

(5) Packaging – Reduced/Recyclable

To manage solid waste, products with reduced packaging, such as concentrated formulas

are preferred. Secondly, recyclable containers are preferable to non-recyclable containers.

Appendix B

Cleaning Documentation

[illegible]

Status Report on Greening of Government for the EAC

February 3, 2006

The Executive Director's Greening of Government Survey yielded over two-dozen employees interested in assisting in the Greening of Government project within CDLE. The ideas and concepts from employees scattered throughout the Department and the Work Force Centers were quite varied, and a few were very innovative. The skills and past experience of our employees in environmental matters also was quite impressive. Because of the magnitude of the response and the desire to include as many participants in future projects as possible, we will try and match skill sets to individual projects as they evolve. Those employees who stated they lacked experience but still wanted to participate will not be over looked.

The initial meeting of the Greening Government Coordinating Council took place on January 25, 2006. CDLE has been selected as one of the seven lead agencies in Colorado state government for the Greening of Government project. The way CDLE completed the survey cycle will be used by the remaining agencies as the model. Upon the completion of the survey by the other agencies, the Coordinating Council will review and prioritize potential projects/programs. Alternative transportation and fuels, Eco-Passes, waste reduction & recycling, moving towards a paperless operation where feasible, evaluating alternative power sources (i.e., wind, solar, etc.), xeriscaping, are obvious candidates. However, examining how electronic signatures, scanning, and digital storage of documents can reduce not only paper usage -- but the extraordinary storage costs paid by the citizens of Colorado -- would be a less obvious project-candidate. The purchasing of environmentally preferable materials by PaCO also comes into play.

Sharing the LEED (Leaders in Engineering and Environmental Design) certification criteria and its benefits with all units of our own Department as well as other agencies could be a significant contribution to the Greening Project. For the construction of the North Wing at 251 East 12th, CDLE received LEED's Certification. This is the first government building in the State to achieve this honor. An impressive power point presentation was developed by Angie Fyfe in UI on how this certification was achieved. Angie's presentation might be interesting for other units in the Department to view. The Coordinating Council certainly found it to be interesting -- and informative! Water usage and energy cost-savings, air quality, environmentally preferable construction materials, recycling, etc. all enter into the LEED's program. Just the sheer tonnage of concrete recycled at 251 East 12th provides an excellent example of reducing the need for new materials that must be extracted from nature.

The first Greening Government Workshop for state employees will be held mid-year. The details of this event will be announced in the near future. Feel free to continue e-mailing in your ideas and recommendations to ron.arthur@state.co.us. They will not be ignored.

Ron Arthur
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